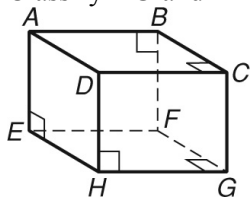


**Regular Geometry Unit 3 Practice Test**

- \_\_\_\_\_ 1. Classify
- $\overline{HG}$
- and
- $\overline{AD}$
- .

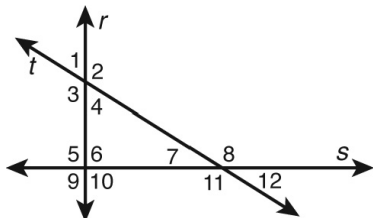


- A skew segments  
B parallel segments  
C perpendicular segments  
D intersecting segments

- \_\_\_\_\_ 2. If lines
- $\ell$
- and
- $m$
- are skew, how many planes contain two points of both lines?

- A 0  
B 1  
C 2  
D 3

- \_\_\_\_\_ 3. Which are NOT alternate interior angles?



- A  $\angle 3$  and  $\angle 6$   
B  $\angle 2$  and  $\angle 7$   
C  $\angle 2$  and  $\angle 3$   
D  $\angle 4$  and  $\angle 5$

- \_\_\_\_\_ 4. The angles formed by two lines and a transversal are labeled 1 through 8. If
- $\angle 1$
- and
- $\angle 8$
- are alternate interior angles and
- $\angle 1$
- and
- $\angle 5$
- are vertical angles, what type of angle pair is
- $\angle 5$
- and
- $\angle 8$
- ?

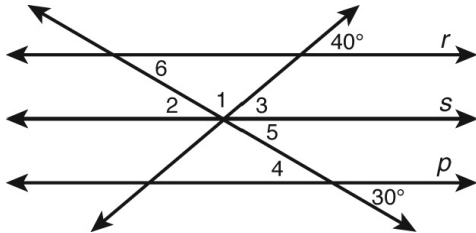
- A alternate exterior angles  
B corresponding angles  
C alternate interior angles  
D same-side interior angles

Name: \_\_\_\_\_

ID: A

\_\_\_\_\_ 5. Which correctly completes the sentence? When two lines are parallel, the acute angles they form with a transversal are \_\_\_\_\_ to the obtuse angles.

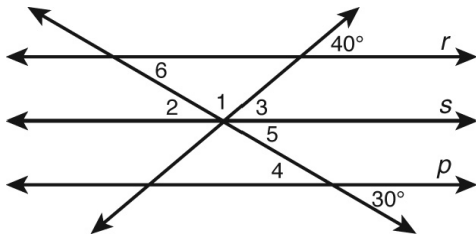
- A supplementary
- B complementary
- C congruent
- D vertical



\_\_\_\_\_ 6.

Given  $r \parallel s \parallel p$ , which angle is NOT congruent to  $\angle 4$ ?

- |              |              |
|--------------|--------------|
| A $\angle 2$ | C $\angle 5$ |
| B $\angle 3$ | D $\angle 6$ |

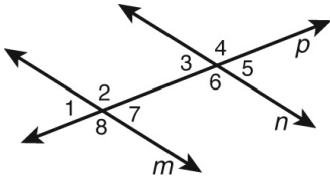


\_\_\_\_\_ 7.

Given  $r \parallel s \parallel p$ , what is the measure of  $\angle 1$ ?

- |              |               |
|--------------|---------------|
| A $40^\circ$ | C $110^\circ$ |
| B $90^\circ$ | D $140^\circ$ |

- \_\_\_\_\_ 8. Which CANNOT be used to prove that lines  $m$  and  $n$  are parallel?



- A  $\angle 2 \cong \angle 4$   
 B  $\angle 4$  is supplementary to  $\angle 7$ .  
 C  $\angle 4$  is supplementary to  $\angle 5$ .  
 D  $\angle 1 \cong \angle 5$

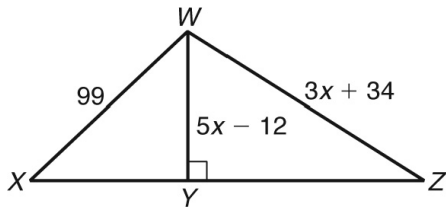
- \_\_\_\_\_ 9. Lines  $r$  and  $s$  are cut by a transversal so that  $\angle 1$  and  $\angle 2$  are same-side interior angles. If  $m\angle 1 = (8x + 40)^\circ$  and  $m\angle 2 = (12x + 20)^\circ$ , for what value of  $x$  is it true that  $r \parallel s$ ?

- A 6  
 B 10  
 C 30  
 D 60

- \_\_\_\_\_ 10. If a transversal is perpendicular to one of two parallel lines, which statement is NOT correct?

- A All the angles formed are congruent.  
 B Every pair of angles is supplementary.  
 C The transversal is  $\perp$  to the other line.  
 D Every pair of angles is complementary.

- \_\_\_\_\_ 11. Which is a possible value of  $x$ ?



- A 21  
 B 23  
 C 25  
 D 26

- \_\_\_\_\_ 12. Given the point  $J(-2, -4)$ , for which point  $K$  is  $\overleftrightarrow{JK}$  a line with undefined slope?
- A  $K(2, 4)$  C  $K(4, 2)$   
B  $K(2, -4)$  D  $K(-2, 4)$
- \_\_\_\_\_ 13. If  $\overline{EF} \perp \overline{GH}$  for the points  $E(-2, 5)$ ,  $F(x, y)$ ,  $G(-2, 2)$ , and  $H(0, 0)$ , which is a possible ordered pair for  $F$ ?
- A  $(2, 1)$  C  $(3, 1)$   
B  $(-1, 4)$  D  $(3, 10)$
- \_\_\_\_\_ 14. Given points  $A(-1, 4)$ ,  $B(0, 4)$ ,  $C(2, 0)$ , and  $D(2, -5)$ , what types of lines are  $\overleftrightarrow{AB}$  and  $\overleftrightarrow{CD}$ ?
- A parallel C horizontal  
B perpendicular D vertical
- \_\_\_\_\_ 15. Which is an equation of a horizontal line?
- A  $x = 3$  C  $y = x$   
B  $y = -4$  D  $y = -x$
- \_\_\_\_\_ 16. Which is the equation of a line that does NOT go through the origin?
- A  $x = 0$  C  $y = x$   
B  $y = x + 1$  D  $y = 2x$
- \_\_\_\_\_ 17. Which line is NOT parallel to  $y = \frac{2}{3}x + 2$ ?
- A  $-2x + 3y = -6$  C  $6y + 12 = 4x$   
B  $\frac{1}{2}y = \frac{1}{3}x - 1$  D  $4x + 6y = 12$

Name: \_\_\_\_\_

ID: A

\_\_\_\_\_ 18. Which of the following is the equation of the line that passes through  $(2, 1)$  and is perpendicular to

$5x + y = 9$ ?

A  $x + 5y = 3$

C  $-x + 5y = 3$

B  $y = -5x + \frac{3}{5}$

D  $y = 5x + \frac{3}{5}$

## Regular Geometry Unit 3 Practice Test

### Answer Section

- |   |        |        |                                  |
|---|--------|--------|----------------------------------|
| 1. ANS: A                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 2. ANS: A                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 3. ANS: C                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 4. ANS: B                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 5. ANS: A                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 6. ANS: B                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 7. ANS: C                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 8. ANS: C                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 9. ANS: A                                   | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 10. ANS: D                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 11. ANS: A                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 12. ANS: D                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 13. ANS: D                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 14. ANS: B                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 15. ANS: B                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 1                       |
| 16. ANS: B                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 17. ANS: D                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | MSC: DOK 2                       |
| 18. ANS: C                                  | PTS: 1 | DIF: 2 |                                  |
| TOP: Chapter 3 Multiple Choice Test, Form C |        |        | NAT: NT.CCSS.MTH.10.9-12.G.GPE.5 |
|   |        |        | MSC: DOK 2                       |